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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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05/15/00

03/16/00

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MICHAEL R. BOYER  
URSCHEN MANAGEMENT CO  
2000 US HWY 63 SOUTH  
MOBERLY MO 65270

IM22/0316

EXAMINER

FUEL AIR M

ART UNIT

PAPER NUMBER

1711

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DATE MAILED:

03/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1 — 20 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1 — 20 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on 4/28/99 is ☒ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - All Some\* None of the CERTIFIED copies of the priority documents have been received.
  - received in Application No. (Series Code/Serial Number) \_\_\_\_\_
  - received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 Notice of Informal Patent Application, PTO-152
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948 Other \_\_\_\_\_

Office Action Summary

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Parry et al or Carey et al taken with Wycech et al and Kagoshima et al .

The primary references disclose that it is old in the art to foam epoxy resins with the use of a blowing agent and an acid source component such as phosphoric acid as the curing agent which when the curing agent reacts with the resin an exothermic heat of reaction occurs thus volatilizing the blowing agent and foaming the resin. While these references do not show the use of a two package system employed to separate the reactants i.e. the resin and the curing agent to prevent premature reaction such system has been sold commercially for many years. In any case Wycech not only discloses such a system and additionally discloses the use the claimed expandable microspheres as foaming agents in said system. Kagoshima is cited to show that it also old in the art to add rubbers such as those claimed in claim 12 and in claim 13. Note that the recitation of the term "styrene" in claim 13 should be recited as "polystyrene". Patentees also disclose the use of expand able microspheres in their foamable composition (see col. 5 line 6 et seq. Of Kagoshima et al. It would have been well within the skill of the routineer to apply the teachings of both Wycech and Kagoshima et al to the disclosure of the primary references in the absence of unexpected results.

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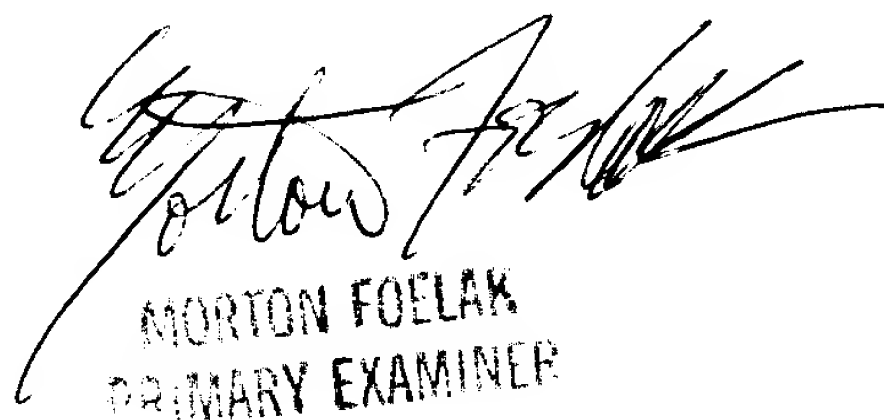
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Applicants' attention is directed to the fact that there should be a clear line of distinction between the instant case and all the other cases related to the instant case, namely Ser. Nos. 081,967; 197,124; and 344,198.

Any inquiry concerning this communication should be directed to Morton Foelak at telephone number (703) 308-2442.

M.F.  
March 14, 2000

  
MORTON FOELAK  
PRIMARY EXAMINER